

PRIMERGY RX100 S5

**Mono Socket Quad-Core Intel® Xeon® UP based
Rack Server – Optimized in cost, size and
complexity for easy deployment**

PRIMERGY RX servers are perfect answers for an IT strategy that seeks to downsize data center infrastructure costs by enhancing transparency of structure, management overhead and maximizing the use of investments.

With RX rack servers and the PRIMECENTER rack enclosures, your benefit from our renowned experience in data center technology, which assures the best quality of data center operation. To guarantee heterogeneous data center assets, the PRIMECENTER modular design accommodates seamless integration of PRIMERGY, SPARC Enterprise compute nodes, storage SAN and NAS subsystems, as well as other infrastructure components such as hubs, KVM switches and more, using a universal power circuit structure.

Cost-effective scaling, simplified operation and enhanced quality of data center IT production are the main benefits in deploying PRIMERGY RX servers. Their centralized PRIMERGY ServerView Suite management functions mean less troubleshooting and costs and remote access from anywhere at any time. The flexible custom supply model and our build-to-order process means that only fully built and pre-tested rack solutions are shipped to the customer – shortening your time to production.

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As business processes and customer bases grow and rely more on Internet technology, data centers face the challenge of rapid enhancements of their front end infrastructure services. Increasingly they are looking for a platform solution that has minimum impact on their budgets, yet is easy to deploy and simple to operate. That is where the RX100 S5 optimally fits in.

With technical evolutions like Quad-Core Intel® Xeon® UP 3200/3300 series CPU, integrated SAS or SATA RAID 0, 1 data protection for up to 2x 3.5-inch “easy change” SATA or 2x 3.5-inch hot-plug SATA/SAS disks and 8 GB direct addressable memory the PRIMERGY RX100 S5 matches your business application requirements perfectly. It combines the benefits of cost-optimized SATA or SAS disk technology with a space-saving 1 U form factor of less than 60 cm in depth. This makes it easy to integrate into any rack enclosures. The standard iRMC S2 (integrated Remote Management Controller) offers enhanced system management and graphics based on IPMI 2.0 technology. Dual-Core Xeon® processors and an even more power saving Celeron® processor round off the offering alternatively.

The set of integrated network and management functions make it a good choice for budget-sensitive infrastructure solutions.



Benefits	Key Features
<ul style="list-style-type: none"> ■ Cost-optimized platform for all datacenter front-end operations ■ Allowing the platform to do more in less time, IT departments can consolidate applications and more effectively employ the server with less power consumption ■ Quad-Core Xeon UP brings huge performance increase ■ Easy to use and data safety 	<ul style="list-style-type: none"> ■ SATA or SAS RAID 0, 1 controller, dual Ethernet, Integrated Remote Management Controller (iRMC S2) as standard, ServerView Local Service Panel (LSP) opt. ■ Intel® Quad-Core Xeon® UP 3200/3300 series or Dual-Core 3000/3100 series with EM64T and virtualization technology, or Pentium DC, Core2 Duo or Celeron® with lowest power consumption ■ Integrated SAS or SATA RAID 0, 1, SATA hot-plug or easy change hard disks ■ 2 x Gbit/s Ethernet LAN with TCP/IP accelerator plus switchable Service LAN (dedicated or shared)
<ul style="list-style-type: none"> ■ Top-speed communications link via LAN as standard will assure continuity in failover mode 	

Type	Mono Socket Rack Server
System board	D2542
Chip set	Intel® 3210
Processor	Intel® Celeron® / Intel® Pentium DC / Core2 Duo / Intel® Xeon® UP (Dual- or Quad-Core)
Frequencies (GHz)	440 (2.0) 35W / E2160 (1.80) / E4600 (2.40) / 3065 (2.33) / E3110 (3.00) DC all 65W / X3210 (2.13), X3220 (2.40) GHz QC 95W / X3350 (2.66); X3360 (2.83) all 95W QC
Front-Side-Bus	800 / 1066 (X32xx) / 1333 MHz DC Xeon UP and X33xx
Second-Level-Cache	512 KB / 1 MB / 2 MB / 4 MB / 6 MB DC Xeon / 2x 4 (32xx) / 2x 6 MB (33xx), ECC
Memory	512 MByte up to max. 8 GByte
unbuffered ECC DDR2-800 SDRAM; organized in 2 banks with 2 DIMM slots each, for modules 512 MB, 1 and 2 GB; with dual channel operation better performance (2 modules with equal capacity needed), Single channel (1 module) configuration	
Flash-EPROM	
Local BIOS update from USB floppy disk, USB Memory Bird; Remote BIOS update via LAN (Global Flash tool).	
Interfaces	
Serial	1 x RS-232-C, 9-pin usable for iRMC or system or shared
Keyboard, Mouse	2 x PS/2
USB	2 x front, 2 x back
Graphics	1 x VGA (15-pin)
LAN	2 x RJ45, 1x Service LAN 10/100 (can be switched on Gbit port and shared)
Front panel	
On/off switch; NMI-, reset button; LEDs for global error (amber/ yellow for Health and CSS), identification (blue), hard disks access (green), power (amber/green); (back: global error, identification, LAN activity, LAN mode)	
Onboard or integrated controller**	
SATA	SATA (for 1x CD-RW / DVD / DVD-RW)
SATA variant Intel® ICH9-R	2-port SATA 300 with RAID 0, 1 controller for easy change SATA hard disks (hot-plug opt.)
SAS variant (LSI1064)	4-Port SAS with RAID level 0, 1 for Windows and Linux for 2 internal hot-plug SAS or SATA HDD's)
LAN (2x Broadcom 5715)	2x 10/100/1000 Mbit/s Ethernet (TCP/IP acceleration)(PXE-Boot via LAN from PXE server), iSCSI Boot (also diskless) via onboard LAN
Server management	Integrated Remote Management Controller (iRMC S2, 32 MB attached memory) incl. graphics controller, IPMI 2.0 compatible
TPM (optional)	Infineon / 1.2
Hard disk drives	160 / 250 / 500 / 750 Gbyte SATA 3.5" 73 / 146 / 300 Gbyte SAS 3.5" (no mix)
1 Gbyte equals one billion bytes when referring to hard disk drive capacity; accessible capacity may vary.	
I/O Slots	1x PCIe x8 (standard, short 175 mm or low profile) 1x PCIe x8 (low profile 170 mm)
Drive bays	
for hard disks	2x 3.5-inch easy change SATA or 2x 3.5-inch hot-plug SAS/SATA opt.
for optional accessible drives	1x 5,25/0,5-inch for ODD 1x 3,5/0,5-inch for ServerView Local Service Panel (LSP)
Electrical values	
Power supply	Standard
Output power	350 W
Rated voltage range	100 - 127, 200 - 240 V
Rated frequency	50-60 Hz
Max. rated current	max. 4 A (100 V - 127 V) max. 2 A (200 V - 240 V)

Rated current in basic configuration	100V – 127V / 1.8 A 200V – 240V / 0.8 A
Active power	177 W
Apparent power	183 VA
Heat emission	637 kJ/h (604 btu/h)
Temperature/Noise/Dimensions/Weight	
Ambient temperature	10°C - 35°C (DIN IEC 721-3-3) class 3K2; ETSI 300 019-2-3 Class 3.1
Declared noise emission according to ISO 9296	idle* operating* (*ISO 7779) ETSI 300 753 Class 3.1
L _{WAd} (1 B = 10 dB) :	4.9 B 6.1 B
L _{pAm} (bystander position):	34 dB 46 dB
Dimensions (HxWxD)	42.5 * 430 * 560 (mm)
Dimension rack mount (HxWxD)	575 mm rack integration depth; 200 mm cable depth; 1 height unit (U)
Rack integration kit	Telescopic Rails with full extraction or partial extraction
Weight	approximately 12 kg (depends on configuration)
Compliance with Norms and Standards	
Product safety	
Global	IEC 60950-1
Europe	EN 60950-1
USA / Canada	UL / CSA 60950-1
Electromagnetic compatibility	
This product and the released accessories, are in compliance with emission class A. In certain cases measures have to be taken to reduce the electro magnetic influence to other equipment.	
Europe	EN 55 022 class A, EN 55024, EN 300386, EN 61000-3-2 / -3, ETSI EN 300386
Taiwan	CNS 13438 class A
Japan	VCCI class A / JEIDA
Australia / New Zealand	AS/NZS CISPR 22 class A
USA / Canada	FCC class A
Declaration of conformity	
Europe (CE)	2004/108/EC(EMV);2006/95 EC(LVD)
North America	FCC class A
Approvals	
Product safety	
Global	CB
Europe	CE
USA / Canada	CSA _{US} / CSA _C
Taiwan / China	BSMI / CCC
There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons, can be applied for on request.	
Supported server operating systems	
See actual release status operating systems : e.g. Windows Server 2003; Windows Server 2008, Novell SUSE Linux Enterprise Server , Red Hat Enterprise Linux (Support of Debian, Ubuntu, Mandriva Linux and other Linux derivatives on demand)	
** For supported controllers (onboard and PCI cards for SAS, RAID, LAN, WAN, etc.), please refer to the corresponding system configurator.	
Server Management (see separate data sheets)	
Standard	PRIMERGY ServerView Suite; PDA, ASR&R
Optional (excerpt)	ServerView Remote Management, iRMC S2 Advanced Pack, ServerView Local Service Panel (LSP)